

What is claimed is:

1. A flange yoke for a universal joint, especially for a universal joint for the transmission of high torques, comprising:

5 a flange element having a longitudinal axis, two first attachment faces that are arranged offset to each other by 180° on a first end face of the flange element on a common circumference around the longitudinal axis, a connection face that is arranged on a second end face of the flange element by which the flange element is connectable to a counter flange, and

10 two bearing elements, each having a bearing bore that is arranged co-axially on a common bore axis that intersects the longitudinal axis of the flange element at a right angle, a second attachment face that abuts one of the first attachment faces of the flange element, and at least two blind holes with internal threads that extend parallel to the longitudinal axis of the flange element starting from the second attachment face, wherein for each blind hole a through bore is arranged that extends parallel to the
15 longitudinal axis in the flange element, wherein the through bores respectively start from a first clamping face and end in one of the first attachment faces, and wherein attachment screws are passed through the through bores and are supported, respectively, via a screw nut or a screw head on the respective first clamping face sit in the blind holes.

20 2. A flange yoke according to claim 1, characterized in that respectively, starting from the first clamping face, the through bores merge in a bore having a larger diameter and that ends in the connection face.

25 3. A flange yoke according to claim 1, characterized in that the flange element has an outer circumferential face that is provided with recesses forming the first clamping face.

4. A flange yoke according to claim 1, characterized in that the flange element has an outer circumferential face that is provided with a circumferential groove forming the first clamping face.

5 5. A flange yoke according to claim 1, characterized in that the first attachment faces and the second attachment faces have means for the transmission of forces in a plane arranged at a right angle to the longitudinal axis, and further have means for centering the bearing elements.

10 6. A flange yoke according to claim 5, characterized in that the first attachment faces of the flange element have, respectively, a groove that extends radially to the longitudinal axis, and that the second attachment faces of the bearing elements have, respectively, a correspondingly formed formation.

15 7. A flange yoke according to claim 5, characterized in that the first attachment faces have toothings, and that the second attachment faces have toothings formed complimentary to the toothings formed in the first attachment faces.

20 8. A flange yoke according to claim 7, characterized in that the teeth of the toothings have, respectively, a first tooth flank that extend at a steep angle to a plane, are arranged at a right angle to the longitudinal axis, and have, respectively, a second tooth flank that extends at a low-gradient angle to the plane.

25 9. A flange yoke according to claim 7, characterized in that the teeth of the toothing extend parallel to the bore axis.

10. A flange yoke according to claim 5, characterized in that the first attachment faces have projections against which the bearing elements are supported in the radial direction.

11. A flange yoke according to claim 5 characterized in that key and groove connections are provided in the first attachment faces and in the second attachment faces.

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12. A flange yoke according to claim 7, characterized in that the teeth of the toothing extend radially towards a center point and are arranged in a plane formed between the longitudinal axis and the bore axis.

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13. A flange yoke according to claim 7, characterized in that the teeth of the toothing extend, respectively, parallel to each other in two areas and that an extension of the teeth of the one area and of the teeth of the other area intersect each other at an angle.

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14. A flange yoke according to claim 1, characterized in that the connection face has centering means for centering the flange element in reference to a longitudinal axis of the counter-flange.

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15. A flange yoke according to claim 14, characterized in that the centering means are represented by a Hirth-end face serration.

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16. A flange yoke according to claim 1, characterized in that the flange element is connectable to the counter-flange by means of connection screws, and that through bores, through which the connection screws are insertable, are provided in the flange element.

17. A flange yoke according to claim 16, characterized in that the through bores for the connection screws, respectively, starting from the connection face, end in a second clamping face that serves for the abutment of a nut or a screw head.

18. A flange yoke according to claim 17, characterized in that the flange element has an outer circumferential face in which two pockets are offset to each other by 180° and are, respectively, arranged in an area between two through bores for attachment screws of a bearing element and which, respectively, form a second clamping face.

19. A flange yoke according to claim 17, characterized in that the flange element has two recesses that extend, respectively, over the circumference between two first attachment faces and that , respectively, form a second clamping face.

20. A flange yoke according to claim 1, characterized in that the flange element is hardened by nitration.

21. A flange yoke according to claim 1, characterized in that the bearing elements are case hardened.